

Understanding and Monitoring Sudden Oak Death/Ramorum Blight in Washington State¹

Washington State Sudden Oak Death

Sudden Oak Death (SOD) and Ramorum Blight are caused by the fungal like organism *Phytophthora ramorum*. This pathogen was first identified in 2000 after it had killed thousands of tan oaks in California and caused a leaf blight on rhododendrons in Europe. Since then it has been found to infect many plants common to Washington's natural and ornamental landscapes, including rhododendron, viburnum, big leaf maple, madrone, grand fir, and Douglas-fir.

To date, *P. ramorum* has spread to the natural landscape in 14 coastal counties in California, and one county in southwestern Oregon. Since 2003 this pathogen has been detected in several western Washington nurseries but has not been detected in Washington's natural or urban environment. The Washington State Department of Agriculture in cooperation with the United States Department of Agriculture are monitoring Washington's nurseries and implementing eradication efforts to keep this pathogen from spreading to the natural environment or landscapes.

Determining if Plant Samples Should be Tested for *P. ramorum*

Symptoms caused by *P. ramorum* include branch tip dieback, very small to large leaf spots, and bleeding cankers. Symptoms vary among host species, and other pathogens and environmental factors such as sunburn, drought, and salinity may produce similar symptoms. Therefore, SOD cannot be visually diagnosed; samples must be sent to a lab for isolations and/or molecular testing.

Though you will not be able to identify SOD in the field, you can screen samples and determine if they should be sent in for further testing. When a client suspects Sudden Oak Death, use the key on the back of this sheet as a guide to determine if the sample should be submitted. On the back of this sheet are also examples of what *P. ramorum* symptoms look like on a few common native and ornamental host plants in Washington state.

Submitting Samples for Testing

If you determine a sample should be submitted for testing the sample should be sent to WSU Puyallup for free diagnosis (postage not included). Please follow the approved procedure found at <http://www.puyallup.wsu.edu/plantclinic/samples/ppd.html>. Sample submission forms can be downloaded directly from <http://www.puyallup.wsu.edu/plantclinic/samples/pdf/c1006.pdf>.

¹ Developed by Norman Dart and Linda Chalker-Scott; reviewed by Gary Chastagner and Jenny Glass, Washington State University Puyallup Research and Extension Center, 7612 Pioneer Way E. Puyallup, WA 98371-4998; 253-445-4500 Funding for this outreach has been provided by the USDA Forest Service, Pacific Southwest Region, Forest Health Protection.

Foliar Symptoms Caused by *Phytophthora ramorum*

Leaf blight of Rhododendron



Missouri Dept. of Conservation

Leaf blight of Camellia



Oregon Dept. of Agriculture

Leaf blight of Viburnum



Oregon Department of Agriculture

Tip dieback of Douglas-fir



Questions to determine the need to submit homeowner sample in Washington State²

- 1) The plant displays leaf blight, defoliation, or stem die back symptoms similar to those shown above.
 - a. Yes- go to 2
 - b. No- Sample can be discarded
- 2) What plant is affected?
 - a. The plant is a camellia, rhododendron, pieris, kalmia, viburnum, or lilac purchased since 2002- Submit sample
 - b. The plant is growing next to a camellia, rhododendron, pieris, kalmia, viburnum, or lilac purchased since 2002- go to 3
 - c. None of the above- unlikely *P. ramorum*. Sample can be discarded.
- 3) Is the plant a known host of *Phytophthora ramorum*?

<http://www.aphis.usda.gov/ppq/ispm/pramorom/resources.html>

 - a. Yes- Submit sample
 - b. Sample can be discarded

² Adapted from guide developed by Jennifer Parke, Oregon State University; Susan Frankel, United States Forest Service, and a key developed Linda Chalker-Scott, Washington State University.